

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 15 JUN 2004

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Applicant's or agent's file reference 65961-0079	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US 03/04135	International filing date (day/month/year) 11.02.2003	Priority date (day/month/year) 19.02.2002
International Patent Classification (IPC) or both national classification and IPC B60R13/02, B60R13/02		
Applicant INTIER AUTOMOTIVE INC. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
  - ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  16.09.2003	Date of completion of this report  14.06.2004
Name and mailing address of the International preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Yildirim, I  Telephone No. +49 89 2399-7216  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

 International application No. **PCT/US 03/04135**
**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

**Description, Pages**

1-4 as originally filed

**Claims, Numbers**

1-10 filed with telefax on 28.04.2004

**Drawings, Sheets**

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-3,5,7,8
Inventive step (IS)	Yes: Claims	
	No: Claims	4,9
Industrial applicability (IA)	Yes: Claims	1-5,7-9
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Re Item V**

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Prior Art**

Reference is made to the following documents:

D1: GB-A-2 345 301 (PRINCE CORP) 5 July 2000 (2000-07-05)

**2. Independent Claim 1**

D1 discloses (the references in parentheses applying to this document):

"a headliner, comprising:

a substrate (70) including a first surface, and opposite, second surface substantially parallel to said first surface forming a thickness of said substrate therebetween, said first surface having a plurality of impressions (72) formed therein along a plane of said first surface so as to create a corresponding number of projections (74) extending outwardly from said second surface ("indentation", "jutting out", "forward extension" don't imply a shape); and

a layer of material (60) attached to said projections (74) of said substrate (70), wherein said layer of material together with said projections form an I-beam structure that enhances the strength of said headliner (see figures 7 and 8)."

The subject-matter of claim 1 is therefore not new (Article 33(2) PCT).

**3. Dependent claims 2 to 5**

Dependent claims 2 to 5 do not appear to contain any additional features which, in combination with the features of claim 1 to which they refer, meet the requirements of the PCT with respect to novelty or inventive step. These claims appear to suggest only slight changes in the system of claim 1 which, having regard to the prior art (see D1), come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject matters of claims 2 to 5 appear to lack novelty or at least an inventive step.

**4. Dependent claims 6 and 10**

The amended claims 6 and 10 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT.

**5. Independent claim 7**

The same reasoning applies, mutatis mutandis, to the subject-matter of the independent claim 7, which therefore is also not new.

**6. Dependent claims 8 and 9**

Dependent claims 8 and 9 do not appear to contain any additional features which, in combination with the features of claim 7 to which they refer, meet the requirements of the PCT with respect to novelty or inventive step. These claims appear to suggest only slight changes in the system of claim 1 which, having regard to the prior art (see D1), come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject matters of claims 8 and 9 appear to lack novelty or at least an inventive step.

**7. Conclusions**

Independent claims 1 and 7 are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art being placed in the preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in D1 is not mentioned in the description, nor is this document identified therein.

The reference signs of the features "first surface (11) **having...impressions**" and "**projections extending...from...second surface (13)**" do not comply with the signs in figures 1 to 3.

According to the requirements of Rule 10.2 PCT, the terminology and the signs shall be

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consistent throughout the application. This requirement is not met in view of the use of the expressions "first/second surface" and "front/back side".

# CLAIMS

What is claimed is:

1. A headliner, comprising:

a substrate (10) including a first surface (11), and an opposite, second surface (13) substantially parallel to said first surface (11) forming a thickness of said substrate (10) therebetween, said first surface (11) having a plurality of impressions (12) formed therein along a plane of said first surface (11) so as to create a corresponding number of projections (14) extending outwardly from said second surface (13) substantially perpendicular to said plane of said first surface (11); and

a layer of material (16) attached to said projections (14) of said substrate,

wherein said layer of material (16) together with said projections (14) form an I-beam structure that enhances the strength of said headliner.

2. The headliner according to Claim 1, wherein said substrate (10) and said layer of material (16) are comprised of polyethylene terephthalate (PET) material.

3. The headliner according to Claim 1, wherein said substrate (10) and said layer of material (16) are comprised of 100% recyclable material.

4. The headliner according to Claim 1, wherein said impressions (12) and corresponding projections (14) are arranged so as to have a maximum number per unit area of substrate (10).

5. The headliner according to Claim 1, further comprising a face fabric (18) attached to said layer of material (16).

6. The interior trim panel according to Claim 1, wherein said plurality of impressions (12) and corresponding projections (14) form a two-dimensional array.

7. A method of manufacturing a headliner, comprising the steps of:

compressing both sides of a substrate (10) so as to form a first surface (11), and an opposite, second surface (13) substantially parallel to said first surface (11) forming a thickness of said substrate (10) therebetween, said first surface (11) having a plurality of impressions (12) formed therein along a plane of said first surface (11) so as to create a corresponding number of projections (14) extending outwardly from said second surface (13) substantially perpendicular to said plane of said first surface (11); and

attaching a layer of material (16) to the projections (14) of the substrate (10),

whereby the layer of material (16) together with the projections (14) form an I-beam structure that enhances the strength of the headliner.

8. The method of Claim 7, further comprising the step of attaching a face fabric (18) to the layer of material (16).

9. The method of Claim 7, further comprising the step of arranging the plurality of impressions (12) and corresponding projections (14) so as to have a maximum number per unit area of substrate (10).

10. The method of Claim 7, wherein the plurality of impressions (12) and corresponding projections (14) form a two-dimensional array.